



Opinions On...Are girls more concerned?

Instructions

Many people are concerned over the future well-being of the global environment. They would argue that the well-being of the environment depends on the action of humans. Monitoring the actions of humans can be difficult. But, conducting surveys that gather opinions (which hopefully mirror actions) is somewhat simpler and can provide us with useful information.

You will have provided your opinions on some environmental issues if you submitted an Australian CensusAtSchool Questionnaire. Questions concerning the importance of environmental issues are particularly relevant.

Task One: Community Attitudes

Quite regularly the ABS and other bodies conduct surveys to canvas opinions. Towards Environmental Sustainability, NSW EPA, 2000 reports findings from surveys conducted by the ABS and the NSW Environment Protection Authority (EPA) about environmental issues. The following is stated:

'The ABS surveys found that younger people are more likely to be concerned about long-term environmental problems. Similarly, the EPA surveys show that the environment is of higher concern among females in the younger age group (15-24 year olds).'

1. Do you think this is still true now?

Opinions will differ from student to student and will be based on their personal thoughts and feelings.

2. Go to the CensusAtSchool website and use the [Random Sampler](#) to obtain a sample of 200 students.

Reference year	Select year
Select questions	All
Year levels	10, 11 and 12

Copy the data for questions 'How important are the following environmental issues to you? (slider scale 1 to 1000)' onto a new, blank sheet.

- 3.** The CensusAtSchool Questionnaire ‘How important are the following environmental issues to you? (slider scale 1 to 1000)’ is divided into six sections (see below). For this slider scale question, the responses are provided in **both** numerical and categorical formats (shown below). Your group needs to decide whether to use numerical or categorical form of the data.

Use the table below to divide the topics among your group. To make a fair comparison, everyone in the group should use the same random sample from CensusAtSchool.

Table showing how Numerical and Categorical Data correlate

Range	Category
0 – 224	Not Very Important
225 – 449	Somewhat Important
450 – 549	Neutral/Don’t Care
550 – 749	Important
750 – 1000	Very Important
Form of data our group is using (Numerical or categorical):	

<u>Topic to Analyse</u>	<u>Student Name</u>
Reducing pollution	
Recycling our rubbish	
Conserving water	
Conserving energy (electricity, gas, oil, lighting, car travel)	
Conserving old growth forests	
Conserving coastal/marine environment	

- 4.** Analyse the data to determine the attitude of students to environmental issues. Draw up a table and summarise your conclusions in a paragraph. Don’t forget we are investigating the percentage of students that selected each category and the difference in attitudes between males and females.

(Hint: It will be easier to count the number of students in each category if you sort the data first using the SORT function in Excel. If you are good at Excel it will be even easier if you use the [COUNTIF](#) function to do the counting for you. e.g. use the

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COUNTIF function to count the number of 'Very Important' responses in each category)

Teacher Note: The results are taken from a random sample of 200. Answers have been rounded to whole numbers.

These sample answers look at the first section 'Reducing Pollution'

sex	Not Very Important (%)	Somewhat Important (%)	Neutral/ Don't Care (%)	Important (%)	Very Important (%)	total
Female	16	15	11	18	39	100
Male	19	11	14	22	35	100
Total	18	13	12	20	37	

The data that was analysed was categorical, looking at how important reducing pollution is to students. The most common response of thirty-seven percent was 'Very Important'. The least common response of twelve percent was 'Neutral'. This indicates that most students have an opinion on whether reducing pollution is important or not. In broader terms, fifty-seven percent of students think reducing pollution is either 'Important' or 'Very Important', and thirty-one percent of students think that reducing pollution is 'Not Very Important' or 'Somewhat Important'. This shows that there are more students concerned with reducing pollution, than students who are not concerned.

- 5.** Analyse the data to determine whether 'the environment is of higher concern among females in the younger age group (15-24 year olds)' is true. Explain your reasoning. Document all of your work and think carefully about what you claim from your findings.

There are several ways to look at this statement. We will assume that being concerned about reducing pollution is a commonality with being concerned about the environment.

Identical percentages of students of fifty-seven per cent for both males and females voted either 'Important' or 'Very Important'. This indicates that both sexes are equally concerned with reducing pollution.

Very similar percentages of students of thirty-one per cent of females and thirty per cent of males voted reducing pollution was either 'Not Very important' or 'Somewhat Important'. This

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indicates that approximately equal percentages of males and females are not concerned with pollution.

Eleven per cent of females and fourteen per cent of males voted 'Neutral' for how they felt about reducing pollution. This indicates that approximately equal percentages of males and females feel neutral about reducing pollution.

From the data in the random sample, the statement 'the environment is of higher concern among females in the younger age group (15-24 year olds)' may be false, as males and females are equally concerned. Since this analysis only looks at one of the six sections of the CensusAtSchool questionnaire concerning the environment, a more thorough analysis of all sections would be more accurate.

Extension

Task Two: Looking into the past.

- 6.** Do the opinions of today's students differ to other community groups now and in the past?

You could visit the following web pages as a starting point:

The Wilderness Society - [The Australian community wants Australia's forests protected](#)

Environmental Protection Authority - Pages exist for all Australian states and territories - google 'EPA' and the name of the state or territory.

Task Three: Has anything changed between 2006 and now?

- 7.** Take a second sample from the CensusAtSchool Random Sampler. This time collect data from 2006. Clearly distinguish the name of this sample from your first sample when you save it.
- 8.** Analyse the 2006 data in the same way you did for your first set of data. Identify any differences between the two samples.